To: Dr. Timothy Sands, Acting President

From: Dr. Victor Lechtenberg, Acting Executive Vice President for Academic Affairs and Provost

Date: September 27, 2012

Re: Proposal for a new degree program—Bachelor's of Science in Civil Engineering to be offered by Purdue University, North Central campus

Objectives: The Bachelor of Science in Civil Engineering degree at Purdue University North Central (PNC) will meet the needs of local students and the workforce requirements of northern Indiana. The graduates would be valuable for northern Indiana construction companies, consulting companies, municipalities, INDOT and more. The graduates would be primarily involved with the analysis, design and development of structural systems, construction projects, transportation projects, environmental projects and water quality.

Clientele to be served: Full- and part-time students would be served from the geographic region surrounding Purdue University North Central in Westville, Indiana, who desire preparation for entry into the workforce dealing with civil engineering activities. An articulation agreement exists with Ivy Tech Community College and PNC for the ITCC statewide pre-engineering program to serve qualified students seeking transfer to PNC engineering programs.

Employment Possibilities: The demand for civil engineers in northern Indiana is good and continues to grow as new opportunities arise and senior civil engineers retire. Northern Indiana has large construction companies, architect and engineering (A&E) companies and more in addition to municipal utilities and the Indiana Department of Transportation. The statewide ranking of job priorities, as given in the Hoosier Hot 50 Jobs report, lists civil engineering jobs in several positions. In addition, civil engineering is among the top 10 degrees in demand by industry according to the United States Department of Labor. According to the Bureau of Labor Statistics, the national outlook for engineering is favorable. Jobs in civil engineering are expected to grow. The average annual salary in civil engineering is $59,715, and with benefits and bonus it increases to $74,828.

Curriculum: The curriculum requires 128 credit hours and has been carefully designed to meet the outcomes and expectations required for ABET accreditation in the minimum number of credits. Students will complete 15 credit hours in the humanities and social sciences; 18 credit hours in mathematics; 16 credit hours in the physical sciences; 44 credit hours of civil engineering courses; and 35 hours of course in other areas of engineering. Some of the courses required for the junior and senior year of this program will be added to the PNC curriculum once the program has been approved.

Enrollment and Resources: Enrollment is projected to be 24 students in the first year (2013) increasing to 75 students by 2017. The quality of library holdings and audio-visual materials need to be supplemented to a modest extent through normal acquisitions and supplies budgets. The existing Construction Engineering & Management Technology laboratory spaces will be utilized in the delivery of the B.S. in Civil Engineering degree program. The labs will not be concurrent, but the spaces can be utilized by both programs. Additional laboratory equipment will be needed, as indicated in the budget.
The program begins with existing faculty resources and allows the number of students to grow before any new faculty are needed. If the program grows as anticipated, an additional two faculty members would be hired by 2015. The additional revenue to the campus based upon additional enrollment would support these hires.

**Approvals:** The proposal has the full endorsement of the North Central campus, and the concurrence of Rao Govindaraju, Head of the School of Civil Engineering.

Recommended Approval:

[Signatures]

Victor Lechtenberg
Acting Executive Vice President for Academic Affairs and Provost

Timothy D. Sands
Acting President